

Appln. No. 09/955,858
Response dated February 10, 2006
Reply to Office Action dated September 27, 2005

Amendments to the Claims:

Please amend claims 10, 11, 14 and 15-18 and add new claims 19-21 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-9 (Cancelled).

Claim 10 (Currently Amended). A method of acquiring image data from a sample containing a plurality of spots, wherein the sample is divided into a plurality of scanning regions with a boundary, ~~[[and]]~~ the scanning regions ~~each have~~ having a predetermined size, ~~the method comprising the steps of:~~

scanning a first scanning region to ~~measure light from~~
acquire image data of the sample;

measuring a light amount on a boundary between the first scanning region and a second scanning region that is adjacent to the first scanning region~~[[, and]]~~;

moving the boundary ~~inside the~~ in a direction of the first scanning region based on a measured value of the light amount;

and

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scanning the second scanning region beginning at the moved boundary to acquire image data of the sample.

Claim 11 (Currently Amended). The method according to claim 10, wherein the sample has a plurality of spots that emit the light, the spots are arranged on a substrate of the sample, and the moving the boundary in a direction of the first scanning
5 region includes moving the boundary between spot lines.

Claim 12 (Previously Presented). The method according to claim 10, wherein the light is reflection light, transmission light, scattered light or fluorescence.

Claim 13 (Previously Presented). The method according to claim 10, wherein the sample is a DNA microarray.

Claim 14 (Currently Amended). The method according to claim 10, wherein the moving the boundary in a direction of the first scanning region includes moving the boundary in a direction of the first scanning region when intensity of the measured
5 [[light]] value of the light amount is higher than a predetermined threshold.

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Claim 15 (Currently Amended). The method according to claim 10, further comprising ~~the steps of:~~

storing image data within the first scanning region ending at the moved boundary; and

5 storing image data within the second scanning region beginning at the moved boundary

~~acquiring scanned image data with the measured light within the first scanning region;~~

~~scanning the second scanning region to measure the light from the sample, the second scanning region having the boundary moved inside the first scanning region;~~

~~acquiring scanned image data with the measured light within the second scanning region; and~~

~~acquiring image data of a region including the first scanning region and the second scanning region with the scanned image data of each scanning region.~~

Claim 16 (Currently Amended). The method according to claim 10, further comprising ~~the step of~~ irradiating light onto the first scanning region.

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Claim 17 (Currently Amended). The method according to claim 10, wherein the ~~step of~~ scanning a first scanning region includes scanning the first scanning region to measure the light from the sample, while irradiating light onto the first scanning region.

Claim 18 (Currently Amended). The method according to claim 10, wherein the ~~step of~~ scanning a first scanning region includes moving the sample.

Claim 19 (New). The method according to claim 10, wherein the moving the boundary in a direction of the first scanning region includes moving the boundary in a direction of the first scanning region when the measured value of the light amount
5 indicates a presence of at least one spot in the image data to be acquired on the boundary.

Claim 20 (New). The method according to claim 10, further comprising storing the acquired image data of a current scanning region, wherein an analysis processing is executed on the stored acquired image data of the current scanning region in parallel
5 with scanning of a next region when the storage of the scanned image data is completed.

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Claim 21 (New). An image data acquiring method of acquiring scanning image data by scanning a sample having a plurality of targets to be measured with light, and receiving light from the sample, comprising:

- 5 inputting scanning image data by scanning a strip region of the sample, which is a part of the sample to be scanned;
- comparing a brightness of a final line of the scanning image data of the strip region with a threshold value;
- storing the input scanning image data of the strip region if
- 10 the brightness of the final line of the scanning image data of the strip region is smaller than the threshold value, and storing the scanning image data of the strip region after reducing a number of scanning lines of the scanning image data of the strip region so that the brightness of the final line of the scanning
- 15 image data of the strip region becomes smaller than the threshold value if the brightness of the final line of the scanning image data of the strip region is equal to or greater than the threshold value; and
- scanning a next strip region from a next scanning line of
- 20 the stored scanning image data of the strip region, inputting the scanning image data of the next strip region and storing the scanning image data of the next strip region by the same method as the previous scanning image data of the strip region.